Rubin & Hays

Kentucky Home Trust Building, 450 South Third Street, Louisville, Kentucky 40202-1410 Telephone (502) 569-7525 Telefax (502) 569-7555 Email: rh@rubinhays.com

CHARLES S. MUSSON W. RANDALL JONES CHRISTIAN L. JUCKETT

PARALEGAL MARY M EMBRY September 17, 2004

SEP 2 0 2004

Published Considering

Case 2004-00366

Ms. Elizabeth O'Donnell Executive Director Public Service Commission P.O. Box 615 Frankfort, Kentucky 40602

Re:

Crittenden-Livingston County Water District - Kentucky Public Service Commission Application for a CPCN for a Water System Improvements Project and approval of financing

Dear Ms. O'Donnell:

Enclosed please find the original and ten (10) copies of the Application of the Crittenden-Livingston County Water District for a Certificate of Public Convenience and Necessity to construct and finance a water system improvements project pursuant to KRS Chapter 278.

Also enclosed are eleven (11) copies of the exhibits required, with the exception of the Preliminary and Final Engineering Reports, two (2) of which are enclosed and the Plans and Specifications, prepared by Stigall Engineering Associates, Inc., on the Project, two of which are being forwarded by said Engineers.

If you need any additional information or documentation, please let us know.

Sincerely,

Rubin & Hays

By W. Randall Jones

WRJ:jlm Enclosures

cc: Mr. Donnie Beavers, CLCWD

Ms. Kristen Curtis, Morgan Keegan

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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SEP 2 0 2004

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In the matter of.	PUBLIC ETT OF October Tom
APPLICATION OF THE CRITTENDEN-	NAVANIN O CIDM
LIVINGSTON COUNTY WATER)
DISTRICT FOR A CERTIFICATE OF PUBLIC)
CONVENIENCE AND NECESSITY TO)	
CONSTRUCT AND FINANCE AN IMPROVE-) Case No. 2004-00366
MENTS PROJECT PURSUANT TO)
KRS 278.020 AND 278.300)

APPLICATION

The Crittenden-Livingston County Water District (the "District"), by counsel, pursuant to KRS 278.020, petitions the Commission for a certificate of public convenience and necessity to construct and finance a waterworks improvement project and finance said project. The following information is filed in accordance with the Commission's regulations:

- 1. The District's office address is P.O. Box 495, Salem, Kentucky 42078. Its principal officers are listed in its 2003 Annual Report, which is on file with the Commission;
- 2. The District is a non-profit water district organized under KRS Chapter 74 and has no separate articles of incorporation or by-laws;
- 3. A description of the District's water system and its property stated at original cost by accounts is contained in its 2003 Annual Report, which is incorporated by reference pursuant to 807 KAR 5:001 Section (5)(5). All required normal financial schedules and other data are in the Annual Report;
- 4. The Phase IX water system improvements project (the "Project") will provide potable water service to approximately 300 residences in rural Crittenden and Livingston Counties. A more

detailed description of the Project is contained in the Preliminary and Final Engineering Reports filed with this Application.

- 5. The Project is in the public interest and is required to permit continued growth in the District's service area;
- 6. The total project cost is approximately \$5,000,000, as forth in the As-Bid Project Budget contained in Section IV of the Final Engineering Report;
 - 7. The District has obtained all easements are required for the Project;
 - 8. This service will not compete with any other utility in the area;
- 9. Based on these facts, the District believes that it is in the public interest that this certificate be granted and that the plan of financing be authorized;
 - 10. Copies of the certified bid tabulations are attached hereto as Exhibit "A";
 - 11. The following information is provided in response to 807 KAR 5:001 Section (8)(3);
- a. Articles of Incorporation None, the District is a statutorily created water district under KRS Chapter 74;
 - 12. The following information is supplied to 807 KAR 5:001 Section (9)(2);
- a. Facts relied upon to show that the Project is in the public interest: The area scheduled for inclusion in the Project was selected and determined by the District based upon engineering requirements and the District's ability to provide water service to the largest number of customers while constructing the least amount of required improvements. The completion of the Project will have no adverse affect or impact on the remaining customers of the District, nor will the Project adversely affect the District's ability to provide adequate water pressure and water supply to its existing and projected future customers located within the District's geographic boundaries.

- b. No new franchises are required. Copies of the permits are attached hereto as **Exhibit "B"**;
- c. Diagrams of the proposed construction and construction specifications are contained in the Plans and Specifications on file with the Commission;
- d. Three (3) maps of suitable scale showing location of the proposed facilities are contained in the Preliminary and Final Engineering Reports;
- e. The construction costs will be funded by a loan in the approximate amount of \$5,003,000 from the Kentucky Rural Water Finance Corporation through it's Flexible Term Program (see preliminary schedules of Morgan Keegan attached as **Exhibit "C"**).
- f. The estimated cost of operation of the system after Project completion is attached hereto as Exhibit "D":
- 13. The following information is provided as required by 807 KAR 5:001 Section (11)(1);
 - a. A general description of the property is contained in the 2003 Annual Report;
- b. Financial information relating to the KRWFC Loan is contained in the Schedules referred to in paragraph 12(e) above;
- c. All funds are to be used in accordance with the Project Budget, see Final Engineering Report;
- d. Two tank sites will be acquired in connection with this Project and copies of the Deeds to said sites will be filed in the near future;
- e. No proceeds of the KRWFC Loan will be used to refund outstanding obligations.

- f. The KRWFC Loan will be repaid out of the revenues of the District's system.
- 14. The following exhibits are provided pursuant to 807 KAR 5:001 section (11)(2);
- a. The District hereby requests and moves for a deviation, pursuant to 807 KAR 5:001, Section 14, from the requirements of 807 KAR 5:001, Section 6, which requires that the financial data filed with the Application be for a twelve (12) month period ending within ninety (90) days of the filing of the application. The District states that there has been no change that is material in nature in the financial condition or operation of the District since December 31, 2003. The financial data filed herewith as **Exhibit "E"** is for the twelve (12) month period ending December 31, 2003. This is the most recent published financial data available. Because the Project has been bid and the District is under a bid-hold period by the Contractors, the District cannot run the risk of delaying the commencement of the Project and losing the favorable bids while more current financial data is compiled;
 - b. There are no trust deeds or mortgages applicable;
- c. Maps and detailed plans are on file with the Commission. Detailed estimates by USOA account numbers are: #331 distribution mains \$3,324,980; #330 reservoirs and standpipes \$759,769.
- 15. District requests that it be granted a deviation under 807 KAR 5:001(14), if necessary to accommodate any situation where inflexible compliance with a regulation would be impracticable, onerous or which would hinder District's daily operations.

WHEREFORE, the Applicant, Crittenden-Livingston County Water District requests that the Public Service Commission of Kentucky grant to the Applicant the following:

A. A certificate of public convenience and necessity permitting the Applicant

to

construct a water system improvement project;

- B. An order approving the financing arrangements, including the loan from the Kentucky Rural Water Finance Corporation in the approximate amount of \$5,003,000.
- C. Applicant's motion for a deviation from the 90 day requirement for financial information as required by 807 KAR 5:001 Section (11)(2)(a).

Crittenden-Livingston County Water District

By Randell OTO
Chairman

Rubin & Hays

W Randall Jones

Kentucky Home Trust Building

450 South Third Street

Louisville, Kentucky 40202

(502) 569-7525

COMMONWEALTH OF KENTUCKY)	SS
COUNTY OF CRITTENDEN	Ó	

The undersigned, Randell O'Bryan, being duly sworn, deposes and states that he is the Chairman of the Crittenden-Livingston County Water District, Applicant, in the above proceedings; that he has read the foregoing Application and has noted the contents thereof; that the same is true of his own knowledge, except as to matters which are therein stated on information or belief, and as to those matters, he believes same to be true.

IN TESTIMONY WHEREOF, witness the signature of the undersigned on this September 2004.

Crittenden-Livingston County Water District

Subscribed and sworn to before me by Randell O'Bryan, Chairman of the Crittenden-Livingston County Water District, on this September 15, 2004.

My Commission expires 4-5-2028

Notary Public

In and for said County and State

STIGALL ENGINEERING ASSOCIATES, INC.

4117 Hillsboro Pike, Suite 206 • Nashville, Tennessee 37215 • Telephone: 615-460-7515 • Facsimile: 615-460-7517

Certified Bid Tabulation

Crittenden-Livingston County Water District Phase IX Water System Improvements Contract "IA": Water Lines 1 – 15, 25 & 50

Thursday July 8, 2004

11:00 a.m. (Local Time)

Bobby Luttrell & Sons, LLC 14912 State Route 69 North Fordsville, Kentucky 42343

No.	Description	Quantity	Unit Price	Bid Amount
01.	12" PVC Water Line (Class 250)	\$,000 LF\$	15.55\$	46,650.00
02.	12" PVC Water Line (Class 200)	14,000 LF\$	13.50\$	189,000.00
03.	10" PVC Water Line (Class 200); open cut		10.25\$	61,500.00
04.	10" PVC Water Line (Class 200); punched	\$	25.00\$	5,000.00
05.	6" PVC Water Line (Class 250)	27,000 LF\$	5.75\$	155,250.00
06.	6" PVC Water Line (Class 200)	14,000 LF\$	5.20\$	72,800.00
07.	4° PVC Water Line (Class 250)	58,000 LF\$	3.95\$	229,100.00
08.	4" PVC Water Line (Class 200)	57,000 LF\$	3.50\$	199,500.00
09.	12" Carrier Pipe, punched under paved areas		25.00\$	17,500.00
10.	6" Carrier Pipe; punched under paved areas	\$	20.00\$	26,000.00
11.	4" Carrier Pipe, punched under paved areas	\$	15.00\$	52,500.00
12.	12" Valves	\$ EA\$	1,260.00\$	5,040.00
13.	10" Valves	\$	1,020.00\$	2,040.00
14.	6" Valves	16 EA\$	495.00\$	7,920.00
15.	4* Valves	\$ EA\$	400.00\$	20,800.00

Bobby Luttrell & Sons, LLC

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IA": Water Lines 1 – 15, 25 & 50
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Quantity	Unit Price	Bid Amount
16.	12" Steel Casing Pipe; jacked and bored	\$	60.00\$	20,400.00
17.	8" Steel Casing Pipe; jacked and bored	\$	50.00\$	14,000.00
18.	8" Tapping Sleeve and Valve	\$	1,500.00\$	1,500.00
19.	6" Tapping Sleeve and Valve	\$ EA\$	1,275.00\$	3,825.00
20.	4" Tapping Sleeve and Valve	\$ EA\$	1,000.00\$	2,000.00
21.	3" Tapping Sleeve and Valve	\$ EA\$	845.00\$	1,690.00
22.	6" x 4" Tapping Sleeve and Valve	2 EA\$	1,065.00\$	2,130.00
23.	Pressure Reducing Valve Vault	1 EA\$	15,000.00\$	15,000.00
24.	Flushing Hydrants	\$	1,700.00\$	22,100.00
25.	Customer Service Assembly w/PRV	\$	450.00\$	45,000.00
26.	3/4" Service Line; open cut	5,000 LF\$	2.00\$	10,000.00
27.	3/4" Service Line; bore and jack	3,000 LF\$	3.00\$	9,000.00
28.	Pump Station No. 1	\$ LS	90,000.00\$	90,000.00
29.	Pump Station No. 2	\$	72,500.00\$	72,500.00
30.	Gravel Surface Replacement	2,000 LF\$	4.00\$	8,000.00
31.	1/4" Minus Backfill, as directed	1,000 TN\$	5.00\$	5,000.00
32.	Radio Telemetry Allowance	\$	65,000.00 <u>\$</u>	65,000.00
	TOTAL AMOUNT BID; ITEMS 1 - 32 IN	ICLUSIVE	\$	1,477,745.00

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IA": Water Lines 1 – 15, 25 & 50
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

Stotts Construction Company, Inc. 3615 Burkesville Road Columbia, Kentucky 42728

No.	Description	Quantity	Unit Price	Bid Amount
NU.	Description			
01.	12" PVC Water Line (Class 250)	\$	18.50\$	55,500.00
02.	12" PVC Water Line (Class 200)	14,000 LF\$	17.00\$	238,000.00
03.	10" PVC Water Line (Class 200); open cut	6,000 LF\$	12.50\$	75,000.00
04.	10" PVC Water Line (Class 200); punched	\$	32.85\$	6,570.00
05.	6" PVC Water Line (Class 250)	\$	6.00\$	162,000.00
06.	6" PVC Water Line (Class 200)	14,000 LF\$	5.30\$	74,200.00
07.	4" PVC Water Line (Class 250)	\$8,000 LF\$	4.00\$	232,000.00
08.	4" PVC Water Line (Class 200)	57,000 LF\$	3.65\$	208,050.00
09.	12" Carrier Pipe, punched under paved areas	\$	40.00\$	28,000.00
10.	6" Carrier Pipe; punched under paved areas	\$	28.00\$	36,400.00
11.	4" Carrier Pipe, punched under paved areas	\$	20.00\$	70,000.00
12.	12" Valves	4 EA\$	1,375.00\$	5,500.00
13.	10" Valves	2 EA\$	1,200.00\$	2,400.00
14.	6" Valves	\$	560.00\$	8,960.00
15.	4" Valves	52 EA\$	475.00\$	24,700.00

Stotts Construction Co., Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IA": Water Lines 1 – 15, 25 & 50
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Quantity	Unit Price	Bid Amount
16.	12" Steel Casing Pipe; jacked and bored	\$40 LF\$	70.00\$	23,800.00
17.	8" Steel Casing Pipe; jacked and bored	\$ 280 LF	58.00\$	16,240.00
18.	8" Tapping Sleeve and Valve	\$	3,600.00\$	3,600.00
19.	6" Tapping Sleeve and Valve	\$ EA\$	1,200.00\$	3,600.00
20.	4" Tapping Sleeve and Valve	\$ EA\$	1,000.00\$	2,000.00
21.	3" Tapping Sleeve and Valve	\$ EA\$	950.00\$	1,900.00
22.	6" x 4" Tapping Sleeve and Valve	2 EA\$	1,150.00\$	2,300.00
23.	Pressure Reducing Valve Vault	1 EA\$	8,800.00\$	8,800.00
24.	Flushing Hydrants	\$ EA\$	1,250.00\$	16,250.00
2 5.	Customer Service Assembly w/PRV	\$	400.00\$	40,000.00
26.	%" Service Line; open cut	\$,000 LF\$	2.50\$	12,500.00
27.	3/4" Service Line; bore and jack	\$	3.50\$	10,500.00
28.	Pump Station No. 1	\$	95,000.00\$	95,000.00
2 9.	Pump Station No. 2	\$	69,900.00\$	69,900.00
30.	Gravel Surface Replacement	\$	12.00\$	24,000.00
31.	1/4" Minus Backfill, as directed	\$	8.00\$	8,000.00
32.	Radio Telemetry Allowance	\$ LS\$	65,000.00 <u>\$</u>	65,000.00
	TOTAL AMOUNT BID; ITEMS 1 – 32 I	NCLUSIVE	\$	1,628,670.00

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IA": Water Lines 1 – 15, 25 & 50
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

I hereby certify that the preceding is a true and accurate transcription of the bids, as received.

Robert D. Stigall, P.E., President Stigall Engineering Associates, Inc. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215-2728 Tennessee Registration No. 18,048

STIGALL ENGINEERING ASSOCIATES, INC.

4117 Hillsboro Pike, Suite 206 • Nashville, Tennessee 37215 • Telephone: 615-460-7515 • Facsimile: 615-460-7517

Certified Bid Tabulation

Crittenden-Livingston County Water District Phase IX Water System Improvements Contract "IB": Water Lines 16-24, 35-36 & 38-42

Thursday July 8, 2004

11:00 a.m. (Local Time)

Burgess Contracting, Inc. 78 Eden Bay Drive Eddyville, Kentucky 42038

No.	Description	Quantity		Unit Price	Bid Amount
thomas and					
01.	6" PVC Water Line (Class 250)	6,000 LF	\$	5.55\$	33,300.00
02.	6" PVC Water Line (Class 200)	48,000 LF	\$		
03.	4" PVC Water Line (Class 250)	22,000 LF	\$	3.70\$	
04.	4" PVC Water Line (Class 200)	67,000 LF	\$	3.40\$	
05.	3" PVC Water Line (Class250)	20,000 LF	\$	3.00\$	
06.	6" Carrier Pipe; punched under				,
	paved areas	1,700 LF	\$	18.00\$	30,600.00
07.	4" Carrier Pipe; punched under				,
	paved areas	500 LF	\$	18.00\$	48,600.00
08.	3" Carrier Pipe; punched under				,,
	paved areas				9,000.00
09.	6" Valves	20 EA	\$	470.00\$	9,400.00
10.	4" Valves	32 EA	\$	390.00\$	12,480.00
11.	3* Valves			365.00\$	1,825.00
12.	12" Steel Casing Pipe; jacked			,	·
	and bored	180 LF	\$	60.00\$	10,800.00
13.	8" Steel Casing Pipe; jacked			·	
	and bored	360 LF	\$	50.00\$	18,000.00
14.	6" Tapping Sleeve and Valve	1 EA	\$	1,450.00\$	1,450.00
15.	6" x 4" Tapping Sleeve and Valve	2 EA	\$	1,285.00\$	2,570,00
16.	6" x 3" Tapping Sleeve and Valve	2 EA	\$	1,030.00\$	2,060.00
17.	8" x 4" Tapping Sleeve and Valve	2 EA	\$	1,390.00\$	2,780.00
18.	Pressure Reducing Valve Vault	3 EA	\$	15,500.00\$	46,500.00
19.	Flushing Hydrants	15 EA	\$	1,125.00\$	16,875.00
20.	Customer Service Assembly w/PRV	100 EA	\$	495.00\$	49,500.00
21.	3/4" Service Line; open cut	5,000 LF	\$	1.70\$	8,500.00
22.	3/4" Service Line; bore and jack	3,000 LF	\$	3.70\$	11,100.00
23.	Gravel Surface Replacement	2,000 LF	\$	4.50\$	9,000.00
24.	1/4" Minus Backfill as directed	1,000 TN	\$	11.50\$_	
	TOTAL AMOUNT ON PERIOD STATE				
	TOTAL AMOUNT BID; ITEMS 1 – 24 II	NCLUSIVE	*****	\$	942,640.00

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IB": Water Lines 16-24, 35-36 & 38-42
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

I hereby certify that the preceding is a true and accurate transcription of the bids, as received.

Robert D. Stigall, P.E., President Stigall Engineering Associates, Inc. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215-2728 Tennessee Registration No. 18,048

STIGALL ENGINEERING ASSOCIATES, INC.

4117 Hillsboro Pike, Suite 206 · Nashville, Tennessee 37215 · Telephone, 615-460-7515 · Facsimile, 615-460-7517

Certified Bid Tabulation

Crittenden-Livingston County Water District Phase IX Water System Improvements Contract "IC": Water Lines 26-34, 43-49 & 51

Thursday July 8, 2004

11:00 a.m. (Local Time)

Burgess Contracting, Inc.
78 Eden Bay Drive
Eddyville, Kentucky 42038

No.	A	Quantity		Unit Price	Bid Amount
	Description	Quantity		CHILLING	JIU AIIIVUIIL
01.	8" PVC Water Line (Class 200)	1 100 LE	¢	7.30\$	8,030.00
02.	6" PVC Water Line (Class 250)			5.55\$	
03.	6" PVC Water Line (Class 200)			4.95\$	
04.	4" PVC Water Line (Class 250)			3.70\$	
05.	4" PVC Water Line (Class 200)				
06.	3" PVC Water Line (Class 200)				
07.	6" Carrier Pipe; punched under		ψ	۷	22,000.00
UI.	paved areas	1700 LE	Q.	18.00\$	30,600.00
08.	4" Carrier Pipe; punched under		Ψ	10.00φ	30,000.00
00.	paved areas	3 000 1 E	¢	18.00\$	54,000.00
09.	3" Carrier Pipe; punched under	**************************************	ψ	10.00φ	34,000.00
00.	paved areas	200 I E	¢	18.00\$	3,600.00
10.	8" Valve			660.00\$	
11.	6" Valve			470.00\$	
12.	4' Valve			390.00\$	
13.	3" Valve			365.00\$	
14.	12" Steel Casing Pine: lacked	······································	v	J00.00	1,400.00
• • •	12" Steel Casing Pipe; jacked and bored	60 L F	\$	60.00\$	3,600.00
15.	8" Steel Casing Pine: jacked		v	νο.ννΨ	0,000.00
	8" Steel Casing Pipe; jacked and bored	120 I F	\$	50.00\$	6,000.00
16.	6" Steel Casing Pipe; jacked		Ψ	ОО.ОО	0,000.00
	and bored	120 I F	\$	46.00\$	5,520.00
17.	4" Tapping Sleeve and Valve	4 FA	\$	1,195.00\$	4,780.00
18.	6" x 4" Tapping Sleeve and Valve				2,570.00
19.	12" x 4" Tapping Sleeve and Valve				3,900.00
20.	Pressure Reducing Valve Vault				15,500.00
21.	Flushing Hydrants				16,875.00
22.	Customer Service Assembly w/PRV				49,500.00
23.	3/4" Service Line; open cut				8,500.00
24.	3/4" Service Line; bore and jack	3.000 LF	\$	3.70 \$	11,100.00
25.	Gravel Surface Replacement	2.000 LF	\$	4.50\$	9,000.00
26.	1/4" Minus Backfill as directed	1.000 TN	\$	11.50\$	11,500.00
		.,	. •	· · · · · · · · · · · · · · · · · · ·	
	TOTAL AMOUNT BID; ITEMS 1 - 26 II	NCLUSIVE	*****		904,595.00
				•	•

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IC": Water Lines 26-34, 43-49 & 51
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

Stotts Construction Co., Inc. 3615 Burkesville Road Columbia, Kentucky 42728

No. 01.	8" PVC Water Line (Class 200)				
	8" PVC Water Line (Class 200)				
		1,100 LF	\$	7.70\$	8,470.00
02.	6° PVC Water Line (Class 250)	/,000 LF		6.00\$	42,000.00
03.	6" PVC Water Line (Class 200)	49,000 LF		5.35\$	262,150.00
03.	A" PVC Water Line (Class 250)	/,000 LF	.	4.10\$	28,700.00
05.	4" PVC Water Line (Class 200)	90.000 LF	\$	3.70\$	333,000.00
05. 06.	3" PVC Water Line (Class 200)	8.000 LF	\$	3.20\$	25,600.00
00. 07.	C" Corrior Ding: nunched under				
UI.	paved areas	1.700 LF	\$	26.00\$	44,200.00
08.	4" Carrier Pipe; punched under	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
VO.	paved areas	3 000 LF	\$	20.00\$	60,000.00
ΛΛ	3" Carrier Pipe; punched under		,		
09.	paved areas	200 LF	\$	18.00\$	3,600.00
40	8" Valve	1 FA	\$	880.00\$	880.00
10.	6" Valve	19 FA	\$	550.00\$	10,450.00
11.	4" Valve	33 FA	\$	495.00\$	16,335.00
12.	3' Valve	4 FA	\$	450.00\$	
13.	407 Chal Coping Ding: jacked	************** * **** * *****	***************************************		
14.	12" Steel Casing Pipe; jacked and bored	60 I F	\$	70.00\$	4,200.00
4=	Of Charl Coping Dipo: jocked	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•		
15.	8" Steel Casing Pipe; jacked and bored	120 I F	S	57.00\$	6,840.00
40	and pored	the second of the second second second	*********		
16.	6" Steel Casing Pipe; jacked and bored	120 I F	\$	45.00\$	5,400.00
4-7	4" Tapping Sleeve and Valve	4 FA	\$	990.00\$	
17.	6" x 4" Tapping Sleeve and Valve	2 FΔ	\$	1,100.00\$	
18.	12" x 4" Tapping Sleeve and Valve	2 LΛ	\$	1,350.00\$	
19.	12" x 4" Tapping Sleeve and Valve	1 FΔ	2	9,000.00\$	
20.	Pressure Reducing Valve Vault	15 FA	\$	1,250.00	,
21.	Flushing Hydrants	10 EA	\$	420.00	
22.	Customer Service Assembly w/PRV	100 LA	\$	2.50	•
23.	3/4" Service Line; open cut	3,000 LF 2 NNN LF	2	3.50	
24.	3/4" Service Line; bore and jack	3,000 LF 2 NNN I E	Ψ •	12.00	
25.	Gravel Surface Replacement	2,000 LF 1 DDD TN	φ	8.00	
26.	1/4" Minus Backfill as directed	1,000 111		U,VV	<u> </u>
	mamar standing min species 4 not	ICI HENE		9	987,235.00
	TOTAL AMOUNT BID; ITEMS 1 - 26 IN	NOLUSIVE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "IC": Water Lines 26-34, 43-49 & 51
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

I hereby certify that the preceding is a true and accurate transcription of the bids, as received.

Robert D. Stigall, P.E., President Stigall Engineering Associates, Inc. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215-2728 Tennessee Registration No. 18,048

STIGALL ENGINEERING ASSOCIATES, INC.

4117 Hillsboro Pike, Suite 206 • Nashville, Tennessee 37215 • Telephone: 615-460-7515 • Facsimile: 615-460-7517

Certified Bid Tabulation

Crittenden-Livingston County Water District Phase IX Water System Improvements Contract "ID": Water Lines 1 - 51

Thursday July 8, 2004

11:00 a.m. (Local Time)

Stotts Construction Co., Inc. 3615 Burkesville Road Columbia, Kentucky 42728

		Quantity	Unit Price	Bid Amount
No.	Description	Qualitity	Office Line	Dia Amount
		0.00015 (s 18.35\$	55,050.00
01.	12" PVC Water Line (Class 250)	3,000 LF		•
02.	12" PVC Water Line (Class 200)	14,000 LF	\$ 16.75\$	234,300.00
03.	10" PVC Water Line (Class 200);	0.00015	* 40.40 ©	74,400.00
	open cut	5,000 LF	\$ 12.40\$	74,400.00
04.	10" PVC Water Line (Class 200);		• ^^ <u></u>	6,570.00
	punched	200 LF	\$ 32.85\$	
05.	8" PVC Water Line (Class 200)	1,100 LF	7.65\$	
06.	6" PVC Water Line (Class 250)	40,000 LF	6.00\$	
07.	6" PVC Water Line (Class 200)	111,000 LF	5.30\$	
08.	4" PVC Water Line (Class 250)	87,000 LF	\$ 4.00\$	
09.	4" PVC Water Line (Class 200)	214,000 LF	\$ 3.65\$	
10.	3" PVC Water Line (Class 250)	20,000 LF	\$ 3.30\$	
11.	3" PVC Water Line (Class 200)	7J 000,8	\$ 3.15\$	25,200.00
12.	40% O Din - , manch ad under			
	paved areas	700 LF	\$ 40.00\$	28,000.00
13.	6" Carrier Pipe: punched under			
	paved areas	4,700 LF	\$ 25.50\$	119,850.00
14.	4" Carrier Pipe; punched under			
	paved areas	9,200 LF	\$ 18.25\$	167,900.00
15.	3" Carrier Pine: punched under	•		
	paved areas	700 LF	\$ 15.00 .	
16.	12" Valve	4 EA	\$ 1,350.00\$	
17.	10" Valve	2 EA	\$ 1,150.00\$	
18.	8" Valve	1 EA	\$ 880.00\$	
19.	6" Valve	55 EA	\$ 540.00\$	
20.	4" Valve	117 EA	\$ 475.00\$	55,575.00
21.	3" Valve	9 EA	\$ 445.00\$	4,005.00
22.	12" Steel Casing Pipe; jacked			
dur fue s	and bored	580 LF	\$ 68.00\$	39,440.00
23.	8" Steel Casing Pine: jacked			
20.	and bored	760 LF	\$ 55.00\$	41,800.00
24.	6" Steel Casing Pipe; jacked	***************************************	,	•
۲٦.	and bored	120 LF	\$ 45.00	54,00.00
25.	8" Tapping Sleeve and Valve	1 EA	\$ 1,600.00	
LU.	o suppling olders did rate minimi		•	*

Statts Construction Co., Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "ID": Water Lines 1 – 51
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Quantity	Unit Price	Bid Amount
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
26.	6" Tapping Sleeve and Valve	4 EA	\$ 1,200.00\$	4,800.00
27.	4" Tapping Sleeve and Valve	6 EA	\$ 990.00	5,940.00
28.	3" Tapping Sleeve and Valve	2 EA	\$ 930.00	1,860.00
29.	6" x 4" Tapping Sleeve and Valve	6 FA	\$ 1,100.00	6,600.00
29. 30.	6" x 3" Tapping Sleeve and Valve	2 FA	\$ 975.00	
30. 31.	8" x 4" Tapping Sleeve and Valve	2 FA	•	
	12" x 4" Tapping Sleeve and Valve	2 FA		
32.	Pressure Reducing Valve Vault	5 FΔ		
33.	Plessure Reducing Valve Vault	Λ3 ΕΔ		.,
34.	Flushing Hydrants	119	,	•
35.	Pump Station No. 1	110		
36.	Pump Station No. 2DDV	200 EV		
37.	Customer Service Assembly w/PRV	45 000 LA	\$ 2.40	,
38.	3/4" Service Line; open cut	13,000 LF	•	
39.	3/2" Service Line; bore and jack	9,000 LF	· •	
40.	Gravel Surface Replacement	b,000 LF		
41.	1/2" Minus Backfill, as directed	3,000 IN	.\$ 8.00	
42.	Radio Telemetry Allowance	1 LS		65,000.00
	TOTAL AMOUNT BID; ITEMS 1 - 42 IN	ICLUSIVE	***************************************	3,574,515.00

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Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "ID": Water Lines 1 – 51
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

The Fishel Co., Inc. 4508 Bishop Lane Louisville, Kentucky 40218

		Overtite	Unit Price	Bid Amount
No.	Description	Quantity	Ulik Filce	Diu Alliount
				70 740 00
01.	12" PVC Water Line (Class 250)	\$,000 LF	23.57\$	70,710.00
02.	12" PVC Water Line (Class 200)	\$ 14,000 LF	22.82\$	319,480.00
03.	10" PVC Water Line (Class 200):			
	open cut	\$,000 LF\$	15.45\$	92,700.00
04.	10" PVC Water Line (Class 200):			
	nunched	\$\$	59.11\$	
05.	8" PVC Water Line (Class 200)	\$	19.12\$	21,032.00
06.	6" PVC Water Line (Class 250)	\$	9.68\$	387,200.00
07.	6" PVC Water Line (Class 200)	\$	9.04\$	1,003,440.00
08.	4" PVC Water Line (Class 250)	\$7,000 LF\$	9.23\$	803,010.00
09.	4" PVC Water Line (Class 200)	\$ 14,000 LF	8.79\$	1,881,060.00
10.	3" PVC Water Line (Class 250)	\$\$	9.00\$	
11.	3" PVC Water Line (Class 200)	\$,000 LF\$	8.71\$	69,680.00
12.	3080 ' D'			
	paved areas	\$	57.36\$	40,152.00
13.	6" Carrier Pipe: punched under			
, • •	6" Carrier Pipe; punched under paved areas	\$,700 LF\$	35.37\$	166,239.00
14.	4" Carrier Pipe: punched under			
	paved areas	9,200 LF\$	27.50\$	253,000.00
15.	3" Carrier Pipe: punched under			
	paved areas		28.81\$	20,167.00
16.	12" Valve	4 EA\$	1,688.69\$	6,754.76
17.	10" Valve	\$ EA\$	1,450.64\$	2,901.28
18.	8" Valve	1 EA\$	787.04\$	787.04
19.	6" Valve	55 EA\$	5550.75\$	30,291.25
20.	4" Valve	117 EA\$	449.72\$	52,617.24
21.	3" Valve	9 EA\$	328.73\$	2,958.57
22.	12" Steel Casing Pine: jacked			
-	and bored	\$ 580 LF	105.37\$	61,114.60
23.	8" Steel Casing Pine: jacked			
	and bored		94.41\$	71,751.60
24.	6" Steel Casing Pipe; jacked	•••••••••••••••••••••••••••••••••••••••	·	•
A 3 7	and hored	\$	69.98\$	
25.	8" Tapping Sleeve and Valve	1 EA\$	3,104.10\$	3,104.10
	FF 9			

The Fishel Co., Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract "ID": Water Lines 1 – 51
Thursday July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Quantity	Unit Price	E	Bid Amount
		<i>A</i> EA	\$ 2,480.83	\$	9,923.32
26.	6" Tapping Sleeve and Valve	4 EA		\$	10,972.86
27.	4" Tapping Sleeve and Valve	PA			2,826.90
28.	3" Tapping Sleeve and Valve	Z EA			
29.	6" v 4" Tanning Sleeve and Valve	A a d	1,502,00		
30.	6" x 3" Tanning Sleeve and Valve	2 EA	1,092.42		4,299.28
31.	8" x 4" Tapping Sleeve and Valve	2 EA	\$ 2,149.64		6,522.26
32.	12" x 4" Tapping Sleeve and Valve	2 EA	\$ 3,201.13		32,205.25
33.	Pressure Reducing Valve Vault	5 EA	0,441.05		,
34.	Eluchina Hudrante	43 EA			109,453.06
35.	Dump Station No. 1	1 LO		\$	157,844.89
36.	Pump Station No. 2	1 L5	140,030.17	Ψ	140,000.71
37.	Customer Service Assembly w/PRV	300 EA		.	161,712.00
38.	3/* Control line: open cut	15.000 LF	2.97		
	3/4" Service Line; bore and jack	9.000 LF	\$ 7.78	,\$	70,020.00
39.	Gravel Surface Replacement	6,000 LF	\$ 6.28	\$	37,680.00
40.	1/2" Minus Backfill, as directed	3 000 TN	\$ 18.04	\$	54,120.00
41.	Radio Telemetry Allowance	118			65,000.00 1
42.	Radio Telemetry Allowance	I LO	**************************************		
	TOTAL AMOUNT BID; ITEMS 1 – 42 IN	ICLUSIVE	katasogu asma 25000 katagu arabatagu pa 1800 ka	\$	6,483,111.43

I hereby certify that the preceding is a true and accurate transcription of the bids, as received.

Robert D. Stigall, P.E., President Stigall Engineering Associates, Inc. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215-2728 Tennessee Registration No. 18,048

^{*} Denotes correction of error on original bid.

STIGALL ENGINEERING ASSOCIATES, INC.

4117 Hillsboro Pike, Suite 206 • Nashville, Tennessee 37215 • Telephone: 615-460-7515 • Facsimile: 615-460-7517

Certified Bid Tabulation

Crittenden-Livingston County Water District Phase IX Water System Improvements Contract II: 100,000 & 600,000 Gallon Elevated Tanks

Thursday, July 8, 2004

11:00 a.m. (Local Time)

	Caldwell Tanks, Incorporated 4000 Tower Road Louisville, Kentucky 40219	
No.	Description	Bid Amount
BID "A	A" <u>Lump Sum</u> : Construct a 100,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical specifications	\$ <u>274,400.00</u>
BID "I 01.	TOTAL AMOUNT BID "A"; ITEM 1 INCLUSIVE B" Lump Sum: Construct a 600,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical specifications TOTAL AMOUNT BID "B"; ITEM 1 INCLUSIVE	\$ 515,400.00
BID " (01.	Lump Sum: Construct a 100,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical specifications Lump Sum: Construct a 600,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical	
	specifications	
	TOTAL AMOUNT BID "C"; ITEM 1 INCLUSIVE	\$ 789,800.00

Caldwell Tanks, Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract II: 100,000 & 600,000 Gallon Elevated Tanks
Thursday, July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Bid Amount
BID "D 01.	Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	
BID "E 01.		
02.	Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	\$ 438,500.00
	TOTAL AMOUNT BID "E"; ITEM 1 INCLUSIVE	\$ 712,900.00

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract II: 100,000 & 600,000 Gallon Elevated Tanks
Thursday, July 8, 2004 at 11:00 a.m. (Local Time)

Phoenix Fabricators & Erectors, Inc. 182 South County Road 900 East Avon, Indiana 46123

No.	Description	Bid Amount
BID "A		
01.	Lump Sum: Construct a 100,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical	
	specifications	\$ 281,645.00
	TOTAL AMOUNT BID "A"; ITEM 1 INCLUSIVE	\$ 281,645.00
BID "B	31	
01.	Lump Sum: Construct a 600,000 gallon elevated storage tank including all appurtenances shown	
	on the drawings and as specified in the technical specifications	\$ 491,370.00
	TOTAL AMOUNT BID "B"; ITEM 1 INCLUSIVE	\$ 491,370.00
BID "C		
01.	Lump Sum: Construct a 100,000 gallon elevated storage tank including all appurtenances shown	
	on the drawings and as specified in the technical specifications	\$ 276,871.00
02.	Lump Sum: Construct a 600,000 gallon elevated storage tank including all appurtenances shown	
	on the drawings and as specified in the technical specifications	\$ 482,898.00
	TOTAL AMOUNT BID "C"; ITEM 1 INCLUSIVE	\$ 759,769.00

0251-02 Certified Bid Tabulation

Phoenix Fabricators & Erectors, Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract II: 100,000 & 600,000 Gallon Elevated Tanks
Thursday, July 8, 2004 at 11:00 a.m. (Local Time)

No.	Description	Bid Amount
DID #D	"	
BID "D 01.	Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	\$ 477,751.00
	TOTAL AMOUNT BID "D"; ITEM 1 INCLUSIVE	\$ 477,751.00
BID "E 01.	Lump Sum: Construct a 100,000 gallon elevated storage tank including all appurtenances shown on the drawings and as specified in the technical specifications	\$ 276,871.00
02.	Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	\$ 469,514.00
	TOTAL AMOUNT BID "E"; ITEM 1 INCLUSIVE	\$ 746,385.00

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract II: 100,000 & 600,000 Gallon Elevated Tanks
Thursday, July 8, 2004 at 11:00 a.m. (Local Time)

Pittsburg Tank & Tower Co., Elevated Division, Inc. 1329 Highway 41 North Sebree, Kentucky 42455

No.	Description Description	Bid Amount
BID "A	13	
01.	Lump Sum: Construct a 100,000 gallon elevated	
	storage tank including all appurtenances shown	
	on the drawings and as specified in the technical specifications	<u>\$ 313,100.00</u>
	TOTAL AMOUNT BID "A"; ITEM 1 INCLUSIVE	
	TOTAL AMOUNT DID A , ITEM T MOLECUTE	, , , , , , , , , , , , , , , , , , , ,
BID "E		
01.	Lump Sum: Construct a 600,000 gallon elevated	
	storage tank including all appurtenances shown on the drawings and as specified in the technical	
	specifications	\$ 499,410.00
	TOTAL AMOUNT BID "B"; ITEM 1 INCLUSIVE	\$ 499,410.00
BID "C	an and an	
01.	Lump Sum: Construct a 100,000 gallon elevated	
	storage tank including all appurtenances shown	
	on the drawings and as specified in the technical	¢ 313 100 00
	specifications	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
02.	Lump Sum: Construct a 600,000 gallon elevated	
	storage tank including all appurtenances shown	
	on the drawings and as specified in the technical	\$ 400 A10 00
	specifications	433,410.00
	TOTAL AMOUNT BID "C"; ITEM 1 INCLUSIVE	\$ 812,510.00

Pittsburg Tank & Tower, Inc.

Certified Bid Tabulation (continued)
Crittenden-Livingston County Water District
Phase IX Water System Improvements
Contract II: 100,000 & 600,000 Gallon Elevated Tanks
Thursday, July 8, 2004 at 11:00 a.m. (Local Time)

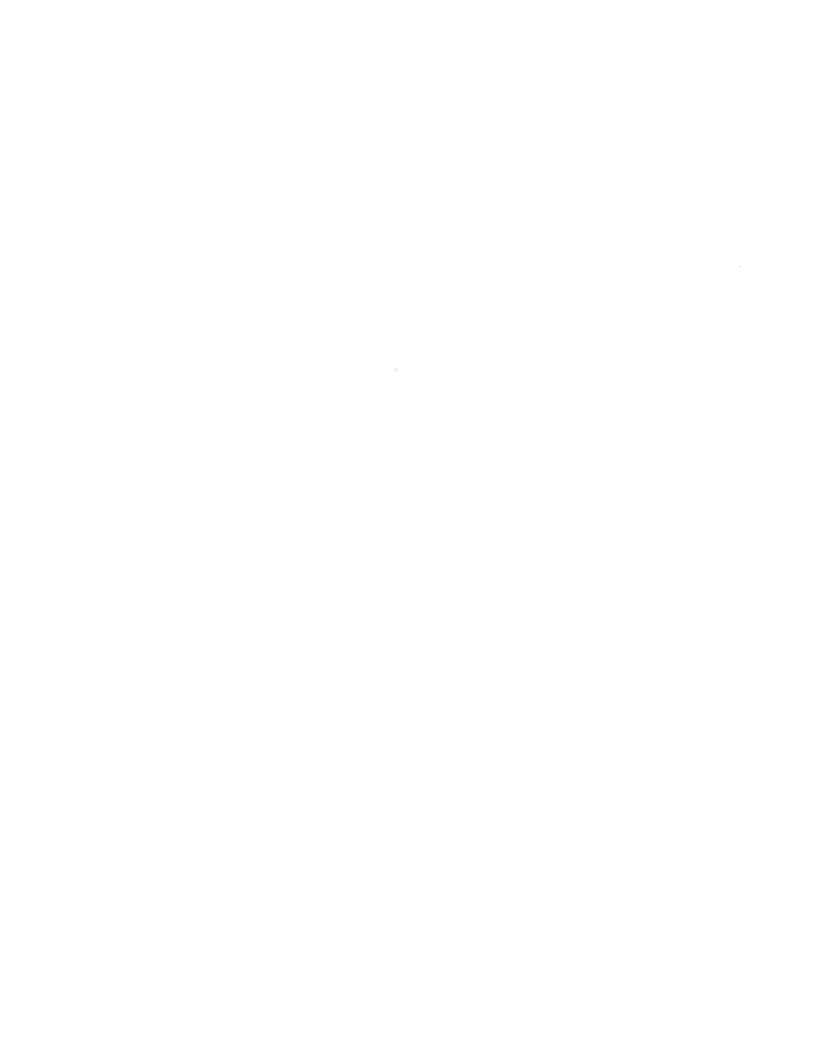
No.	Description	Bid Amount
BID "D 01.	" Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	
BID "E 01.		
02.	Lump Sum: Construct a 500,000 gallon elevated storage tank (instead of a 600,000 gallon tank) including all appurtenances shown on the drawings and as specified in the technical specifications	<u>\$ 459,090.00</u>
	TOTAL AMOUNT BID "E"; ITEM 1 INCLUSIVE	\$ 772,190.00

I hereby certify that the preceding is a true and accurate transcription of the bids, as received.

Robert D. Stigall, P.E., President Stigall Engineering Associates, Inc. 4117 Hillsboro Pike, Suite 206

Nashville, Tennessee 37215-2728

Tennessee Registration No. 18,048





ERNIE FLETCHER
GOVERNOR

ENVIRONMENTAL AND PUBLIC PROTECTION CABINET

LAJUANA S. WILCHER SECRETARY

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601-1190
www.kentucky.gov
June 16, 2004

Crittenden-Livingston County Water District Mr. Donnie Beavers, District Superintendent P.O. Box 495 Salem, Kentucky 42078

RE:

Agency ID# 2727 APE20040001

DW # 0700532-04-001

2004, Phase IX Improvements Crittenden and Livingston Co's.

Dear Mr. Beaver:

We have reviewed the plans and specifications for the above referenced project. The plans include the construction of approximately 22,147 ft of 10-inch, 1,050 ft of 8-inch, 150,034 ft of 6-inch, 305,532 ft of 4-inch and 26,773 ft of 3-inch PVC waterline. Also included are one (1) 600,000 gallon Elevated and one (1) 100,000 Elevated water storage tanks, along with two pump stations rated at 315 gpm @ 185 ft TDH and 95 gpm @ 160 ft TDH each. This is to advise that plans and specifications for the above referenced project are APPROVED with respect to sanitary features of design, as of this date with the requirements contained in the attached construction permit.

If you have any questions concerning this project, please contact Scott Thomson at (502) 564-2225, extension 549.

Sincerely,

Donna S. Marlin, Manager Drinking Water Branch Division of Water

DSM:JST

Enclosures

C: Stigall Engineering Associates, Inc.
Crittenden County Health Department
Livingston County Health Department
Public Service Commission
Water Quality
Water Resources-Floodplain Section

Page i of ii

Distribution-Major Construction Crittenden Livingston Co Water District Subject Item Inventory

Activity ID No.: APE20040001

Subject Item Inventory:

Subject 10	Subject field thycutory.	
А	Designation	Description
AIO02727		
PORT3	waterline	Install 22,147 ft of 10-inch, 1,050 ft of 8-inch, 150,034 ft of 6-inch, 305,532 ft of 4-inch and 26,773 ft of 3-inch PVC waterline in Crittenden and Livingston Counties
PORT4	pump station	Install pump station on Hwy 60 west of Marion
PORT5		Install pump station on SR-133 & SR-137
STOR1	storage tanks	Install tank off Hwy 506 near Marion
STOR2	storage tanks	Install tank off Cayne Road

Subject Item Groups:

Subject Item Groups:	
TD Description	Components
GACT4 Install 506,000 ft of waterline, two pump stations and	PORT4 Install pump station on Hwy 60 west of Marion
two water storage taling	PORT5 Install pump station on SR-133 & SR-137
	STOR1 Install tank off Hwy 506 near Marion
	STOR2 Install tank off Cayne Road
	PORT3 Install 22,147 ft of 10-inch, 1,050 ft of 8-inch, 150,034 ft of 6-inch, 305,532 ft of 4-inch and 26,773 ft of 3-inch PVC waterline in Crittenden and Livingston Counties

The state of the s	
KEY	
ACTV = Activity	AlOU = Agency interest
AREA = Area	COMB = Combustion
FOPT = Fourient	MNPT = Monitoring Point
DEDS = Derconnel	PORT = Transport
CTOB = Corners	STRC = Structure
Story Storings	

Distribution-Major Construction

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 1 of 21

GACT4 (Phase IX) Install 506,000 ft of waterline, two pump stations and two water storage tanks:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new or relocated water line(s). Take samples at connection points to existing lines, at 1 mile intervals, and at dead ends without omitting any branch of the new or relocated water line. Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:150 Section 1(7), 401 KAR 8:150 Section 4, Recommended Standards for Water Works 8.5.6] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.
M-2	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new storage structure(s). With at least 1-sample taken at least 24 hours after the first construction complete sample(s), take 2 or more samples from the yard hydrant, the outlet piping from the storage structure, or a sample tap directly connected to the storage structure. Sample bottles shall be clearly identified as "special" construction tests. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:150 Section 4] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.
M-3	Coliform	The presence or absence of total Coliform monitored by sampling and analysis as needed shall be determined for the new pump(s). If the pump(s) are independent of (not directly connected to) the new or relocated lines, take at least 1 sample at the discharge side pitcock. Otherwise, no additional sampling beyond the sampling required for new or relocated lines shall be required in association with the pump(s). Sample bottles shall be clearly identified as "special" construction tests. [401 KAR 8:100 Section 1(7)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Distribution-Major Construction Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 3 of 21

Narrative Requirements:

Condition	
No.	Condition
T-2	This project has been permitted under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the applicant from the responsibility of obtaining any other approvals, permits or licenses required by this Cabinet and other state, federal and local agencies. [401 KAR 8:100 Section 1(7)]
T-3	Unless construction of this project is begun within 1 year from the issuance date of this permit, the permit shall expire. If requested prior to the permit expiration, an official extension from the Division of Water may be granted. If this permit expires, the original plans and specifications may be resubmitted for a new comprehensive review. If you have any questions concerning this project, please contact the Drinking Water Branch at 502/564-3410. [401 KAR 8:100 Section 1(9)]
T-4	During construction, a set of approved plans and specification shall be available at the job site at all times. All work shall be performed in accordance with the approved plans and specifications. [401 KAR 8:100 Section 1(7)(a)]

Distribution-Major Construction Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 5 of 21

Limitation Requirements:

Condition No.	Parameter	Condition
L-8	Distance	Except when not practical, water lines shall be laid a horizontal Distance >= 10 ft from any existing or proposed sewer. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, water lines may be installed closer to a sewer provided that the water lines shall be laid in a separate trench or on an undisturbed shelf located on one side of the sewer at such an elevation that the bottom of the water line is at least 18 inches above the top of the sewer. [Recommended Standards for Water Works 8.6.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
F-9	Distance	When water lines and sewers cross, 1) water lines shall be laid such that the bottom of the water line is a vertical Distance >= 18 in above the top of the sewer line, 2) 1 full length of the water pipe shall be located so that both joints of the water pipe will be as far from the sewer as possible, and 3) special structural support for the water and sewer pipes may be required. [Recommended Standards for Water Works 8.6.3] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-10	Distance	The open end of an air relief pipe from automatic valves shall be extended a Distance >= 1.0 ft above grade and provided with a screened, downward-facing elbow. The pipe from a manually operated valve shall be extended to the top of the pit. Use of manual air relief valves is recommended wherever possible. [Recommended Standards for Water Works 8.4.2] This requirement is applicable during the following months: All Year. Statistical basis: Not applicable.
L-11	Pressure	Pipes shall not be installed unless all points of the distribution system remain designed for ground level Pressure >= 20 psi under all conditions of flow. [Recommended Standards for Water Works 8.1.1] This requirement is applicable during the following months: All Year. Statistical basis: Minimum.
L-12	Pressure	Pressure >= 30 psi must be available on the discharge side of all meters. [401 KAR 8:100 Section 4(2)] This requirement is applicable during the following months: All Year. Statistical basis: Instantaneous determination.

Distribution-Major Construction

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 7 of 21

Narrative Requirements:

Asbestos (Friable):

Condition No.	Condition
T-1	Asbestos (Friable): If the existing water line to be tapped is asbestos concrete, then the contractor shall conform to OSHA regulations governing the handling of hazardous waste during the process of tapping the asbestos concrete line. Pieces of asbestos concrete resulting from the tap shall be double bagged, placed in a rigid container and disposed of in an approved landfill. [401 KAR 8:100 Section 1(7)]
Additie	Additional Limitations:
Condition No.	Condition
T-2	Additional Limitations: Water line installation shall be in accordance with AWWA standards or manufacturer recommendations. [Recommended Standards for Water Works 8.5.1]
T-3	Additional Limitations: Pipes, fittings, valves and fire hydrants shall conform to the latest standards issued by the AWWA or NSF (if such standards exist). PVC and PE piping used must be certified to ANSI/NSF Standard 61. [Recommended Standards for Water Works 8.0.1]
1 -4	Additional Limitations: At high points in water lines, where air can accumulate, provisions shall be made to remove the air by means of hydrants or air relief valves. Automatic air relief valves at high points in water lines, where manhole or chamber flooding may occur. [Recommended Standards for Water Works 8.4.1]
T-5	Additional Limitations: All tees, bends, plugs and hydrants shall be provided with reaction blocking, tie rods or joints designed to prevent movement. [Recommended Standards for Water Works 8.5.4]
J-6	Additional Limitations: For lines that dead end, a fire hydrant shall be required at the end of each 6 inch or larger diameter line and a flush hydrant shall be required at the end of each line for lines that dead end, a fire hydrant shall be required at the end of each line that is less than 6 inches in diameter. [Recommended Standards for Water Works 8.1.6]

Additional Limitations: For each fire or flush hydrant, auxiliary valves shall be installed in the hydrant lead pipe. [Recommended Standards for Water Works 8.3.3]

T-7

Distribution-Major Construction

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 9 of 21

Narrative Requirements:

Subfluvial Pipe Crossings:

Condition	
No.	Condition
T-13	Subfluvial Pipe Crossings: For subfluvial pipe crossings, a floodplain construction permit will not be required pursuant to KRS 151.250 if the following requirements of 401 KAR 4:050
	Section 2 are met. No material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc. during construction of
	pipe crossings. 2) Crossing trenches shall be backfilled as closely as possible to the original contour.
	3) All excess material resulting from construction displacement in a crossing trench shall be disposed of outside the flood plain.
	4) For crodible channels, there shall be at least 30 inches of backfill on top of all pipe or conduit points in the crossing.
	5) For nonerodible channels, pipes or conduits in the crossing shall be encased on all sides by at least 6 inches of concrete with all pipe or conduit points in the
	crossing at least 6 inches below the original contour of the channel. [401 KAR 8:100 Section 1(7)]

Subfluvial Pipe Crossings: T-14

- For subfluvial pipe crossings greater than 15 feet in width,

 1) the pipe shall be of special construction, having flexible, restrained, or welded watertight joints, and

 2) valves shall be provided at both ends of water crossings so that the section can be isolated for testing or repair. the pipe s
 valves shall

- be easily accessible,
- a) be easily accessible,
 b) not be subject to flooding, and
 c) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and
 c) if closest to the supply source, be in a manhole with permanent taps made on each side of the valve to allow insertion of a small meter to determine leakage and for sampling purposes. [Recommended Standards for Water Works 8.7.2]

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 11 of 21

Condition		
No.	Parameter	Condition
L-6	Height	Pumping stations shall not be subject to flooding. To this end, 1) grading around stations shall lead surface drainage away and 2) stations shall be elevated or protected to a Height >= 3 ft above the highest of the following: a) the 100-year flood elevation, or b) the highest recorded flood elevation. [Recommended Standards for Water Works 6.1.1, Recommended Standards for Water Water Water Recommended Standards for Water Water Water Recommended Standards for Water Recommended Stan
L-7	Height	When a pump station has pits or compartments which must be entered, stairways or ladders shall be provided between all floors. Stairs shall have risers with a Height <= 9 in, handrails on both sides, and treads with non-slip material wide enough for safety. [Recommended Standards for Water Works 6.2.3] This requirement is applicable during the following months: All Year. Statistical basis: Maximum.

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
	Additional Limitations: Pumping stations shall be so located that the proposed site will meet the requirements for hydraulics of the system. [Recommended Standards for Water Works 6.1]
T-2	Additional Limitations: Pumping stations shall be readily accessible at all times for servicing and repairs. [Recommended Standards for Water Works 6.1.1.b, Recommended Standards for Water Works 6.4.3]
T-3	Additional Limitations: Pumping stations shall be designed to prevent vandalism and protect against entrance of animals or unauthorized persons. [Recommended Standards for Water Works 6.1.1.d]
T-4	Additional Limitations: Pumping stations shall be of durable construction with outward-opening doors. [Recommended Standards for Water Works 6.2.b]

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 13 of 21

Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-15	Additional Limitations: All electrical equipment and work shall conform with the applicable state and local electrical codes and the National Electrical Code. [Recommended Standards for Water Works 6.2.7]
T-16	Additional Limitations: Pump stations shall be adequately lighted throughout. [Recommended Standards for Water Works 6.2.7]
T-17	Additional Limitations: All automatic pump stations shall be provided with automatic signaling apparatus which will report when the station is out of service. All remote controlled stations shall be electrically operated and controlled and shall have signaling apparatus of proven performance. [Recommended Standards for Water Works 6.5]
T-18	Additional Limitations: Automatic or remote control pump stations shall be located or shall have control devices setup so that the range between start and cutoff pressure prevents excessive pump cycling. [Recommended Standards for Water Works 6.4.d]
T-19	Additional Limitations: Equipment shall be provided or other arrangements made to prevent surge pressures from activating controls which switch on pumps or activate other equipment outside the normal design cycle of operation. [Recommended Standards for Water Works 6.6.5]
T-20	Additional Limitations: Provisions shall be made to prevent energizing the motor in the event of a backspin cycle. [Recommended Standards for Water Works 6.6.5]
T-21	Additional Limitations: Pump stations shall be provided with enough heat to prevent freezing of equipment or treatment processes. [Recommended Standards for Water Works 6.2.4]
T-22	Additional Limitations: Pumps that is sized so that if any single pump is out service, the remaining pump or pumps shall be capable of pump stations shall have at least 2 pumps. Pump stations shall have at least 2 pumps, and be capable of providing the peak demand on the station. [Recommended Standards for Water Works 6.3, Recommended Standards for Water Works 6.4.1]
T-23	Additional Limitations: Provisions shall be made for pump alternation. [Recommended Standards for Water Works 6.6.5]

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

Page 15 of 21

Narrative Requirements:

Additional Limitations:

	ndition	
	Condition	
Condition	No.	

Additional Limitations: T-30

 b) from a primary source with a standby or auxiliary source provided.
 If standby power is provided by onsite generators or engines, the fuel storage and fuel line must be designed to protect the water supply from contamination.
 [Recommended Standards for Water Works 6.6.6] To ensure continuous service when the primary power is interrupted, power supplied to pump stations shall be a) from at least 2 independent sources or from a primary source with a standby or auxiliary source provided.

Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

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Narrative Requirements:

Additional Limitations:

Condition No.	Condition
T-1	Additional Limitations: The materials and designs used for storage structures shall provide stability and durability as well as protection for the quality of the stored water. Steel structures The materials and designs used for storage structures shall provide stability and durability are applicable. Other materials of construction are acceptable when properly designed to meet the requirements in this permit. [Recommended Standards for Water Works 7.0]
T-2	Additional Limitations: The safety of employees must be considered in the design of any tank. The design of tanks shall a) meet or exceed the minimum requirements of pertinent safety laws and regulations in the areas where the tanks are constructed, b) include ladders, ladder guards and balcony railings (where applicable), c) locate entrance hatches in safe places, d) provide railings or handholds where persons must transfer from an access tube to the water compartment, and c) consider confined space entry requirements. Additionally, if tanks have riser pipes over 8 inches in diameter, the tanks shall have protective bars over the riser openings inside of the tank. [Recommended Standards for Water Works 7.0.12]
T-3	Additional Limitations: Storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. Where space permits, at least 2 manholes shall be provided above the waterline at each water compartment. [Recommended Standards for Water Works 7.0.8]
T-4	Additional Limitations: Fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage. [Recommended Standards for Water Works 7.0.4]
T-5	Additional Limitations: All storage structures and their appurtenances, especially the riser pipes, overflows, and vents, shall be designed to prevent freezing. [Recommended Standards for Water Works 7.0.13]

Tanks shall be constructed with no openings except properly constructed vents, manholes, overflows, risers, drains, control ports, and piping for inflow and outflow. Any pipes running through the roof or sidewall must be welded or properly gasketed. [Recommended Standards for Water Works 7.0.10]

All finished water storage structures shall have suitable watertight roofs and sidewalls which exclude birds, animals, insects, and excessive dust. [Recommended Standards for Water Works 7.0.10]

Additional Limitations:

T-7

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Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

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Narrative Requirements:

Additional Limitations:

Condition	
No.	Condition
T-16	Additional Limitations: Appropriate sampling tap(s) shall be provided to facilitate collection of water samples for both bacteriologic and chemical analyses. [Recommended Standards for Water Works 7.0.19]
T-17	Additional Limitations: Storage structures shall be vented. Overflows shall not be considered as vents. Open construction between the sidewall and roof is not permitted. Vents shall a) prevent the entrance of rainwater, a) prevent the entrance of rainwater, b) exclude birds and animals, and c) exclude insects and dust (as much as compatible with effective venting). Vents may use four-mesh noncorrodible screen. [Recommended Standards for Water Works 7.0.9]
T-18	Additional Limitations: Adequate controls shall be provided to maintain levels in storage structures. The level controls shall be acceptable to the Division of Water. Level indicating devices should be provided at a central location. Overflow and low-level warnings or alarms should be located at places in the community where they will be under responsible surveillance 24 hrs a day. [401 KAR 8:100 Section 1(7), Recommended Standards for Water Works 7.3.3]
T-19	Additional Limitations: If storage structures have a catwalk over the water, the catwalk floor shall be solid with raised edges so that shoe scrapings and dirt will not fall into the water. [Recommended Standards for Water Works 7.0.14]
T-20	Additional Limitations: Proper protection shall be given to metal surfaces by a) paints or other protective coatings and/or b) cathodic protective devices. [Recommended Standards for Water Works 7.0.17]
T-21	Additional Limitations: If cathodic protection is utilized, a) competent technical personnel should design and install the protection and b) a maintenance contract should be provided. [Recommended Standards for Water Works 7.0.17]
T-22	Additional Limitations: If the interior of the storage structure is coated or lined, the coating or lining shall be of a type approved by the Division of Water for use in contact with potable water. [401 KAR 8:020 Section 2(19)]

Distribution-Major Construction Crittenden Livingston Co Water District Facility Requirements

Activity ID No.: APE20040001

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Narrative Requirements:

Condition No.	Condition
T-25	If applicable, chlorination method 1 generally requires a) filling a storage structure to the overflow level with water providing a free chlorine Residual Disinfection >= 10 ppm and b) i) completely draining the storage facility and refilling or b) ii) otherwise reducing (in accordance with method 1) the free chlorine residual to a level appropriate for distribution. [Recommended Standards for Water Works 7.0.18]
T-26	If applicable, chlorination method 2 generally requires a) scrubbing or spraying the water-contact surfaces of a storage structure with a water solution having an available chlorine concentration = 200 ppm and scrubbing or spraying the water-contact surfaces of a storage structure with a water solution and filling to the overflow level. [Recommended Standards for Water Works 7.0.18]
T-27	If applicable, chlorination method 3 generally requires a) filling a storage structure to approximately 5% of the total storage volume with water having an available chlorine concentration of 50 ppm, b) continued filling of the storage structure to the overflow level with normal potable water, and c) purging the storage structure so that various disinfection by-products do not reach water consumers. [Recommended Standards for Water Works 7.0.18, 401 c) Purging the storage structure so that various disinfection by-products do not reach water consumers. [Recommended Standards for Water Works 7.0.18, 401 KAR 8:100 Section 1(7)]

- 4. Utility line construction projects through jurisdictional wetlands shall not result in conversion of the area to non-wetland status.
- 5. This General Certification shall not apply to those waters of the Commonwealth identified as Outstanding State Resource Waters, Exceptional Waters or Cold Water Aquatic Habitat Waters, as designated by the Division of Water. An individual Water Quality Certification will be required for projects in these waters.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

This general certification will expire on March 19, 2007, or sooner if the COB makes significant changes to this nationwide permit.

Crittenden-Livingston Water District

Kentucky Rural Water Finance Corporation Flexible Term Finance Program

Sources & Uses

Dated 08/27/2004 | Delivered 08/27/2004

SOURCES OF FUNDS Par Amount of Bonds	\$5,003,000.00
AT Amount of Dorius	
TOTAL SOURCES	\$5,003,000.00
USES OF FUNDS	26,998.93
	48,046.07
	72,542.00
Costs of Issuance	24,534.02
Gross Bond Insurance Premium (29.0 bp)	196,752.26
	4,633,349.00
Deposit to Project Construction Fund	777.72
Rounding Amount	Manager of the second s
TOTAL USES	\$5,003,000.00

Crittenden-Livingston Water District

Kentucky Rural Water Finance Corporation Flexible Term Finance Program

Net Debt Service Schedule

			,		Trustee		
Date	Principal	Coupon	Interest	Total P+I	Fee	CIF	Net New D/S
2/30/2004		-	~	÷			450.00
12/30/2004	~	-	196,752.26	196,752.26	450.00	(196,752.26)	-
12/30/2000	-	-	212,068.30	212,068.30	450.00	*	212,518.30
12/30/2007	143,000.00	2.160%	210,523.90	353,523.90	450.00	-	353,973.90
12/30/2007	146,000.00	2.530%	207,132.60	353,132.60	450.00		353,582.60
12/30/2009	149,000.00	2.880%	203,140.10	352,140.10	450.00	-	352,590.10
12/30/2009	154,000.00	3.110%	198,599.80	352,599.80	450.00	~	353,049.80
12/30/2010	158,000.00	3.310%	193,590.20	351,590.20	450.00	*	352,040.20
	164,000.00	3.490%	188,113.50	352,113.50	450.00	•	352,563.50
12/30/2012	169,000.00	3.640%	182,175.90	351,175.90	450.00		351,625.90
12/30/2013	176,000.00	3.790%	175,764.90	351,764.90	450.00	-	352,214.90
	182,000.00	3.890%	168,889.80	350,889.80	450.00	*	351,339.80
12/30/2015	189,000.00	4.020%	161,551.00	350,551.00	450.00	-	351,001.00
12/30/2016	197,000.00	4,130%	153,684.05	350,684.05	450.00	-	351,134.05
12/30/2017	205,000.00	4.220%	145,290.50	350,290.50	450.00		350,740.50
12/30/2018	214,000.00	4.300%	136,364,00	350,364.00	450.00	•	350,814.00
12/30/2019		4.450%	126,801.25	349,801.25	450.00	-	350,251.25
12/30/2020	223,000.00	4.550%	116,538.75	349,538.75	450.00	-	349,988.75
12/30/2021		4.550%	105,709.75	348,709.75	450.00	•	349,159.75
12/30/2022	243,000.00	4.650%	94,276.00	348,276.00	450.00		348,726.00
12/30/2023	254,000.00	4.750%	82,053.00	348,053.00	450.00	*	348,503.00
12/30/2024	266,000.00	4.800%	69,039.50	348,039.50	450.00	*	348,489.50
12/30/2025	279,000.00		55,189.50	347,189.50	450.00	-	347,639.50
12/30/2026	292,000.00	4.900%	40,437.25	347,437.25	450.00	•	347,887.25
12/30/2027	307,000.00	4.950%	24,869.50	346,869.50	450.00	-	347,319.50
12/30/2028	322,000.00		8,450.00	346,450.00	450.00	+	346,900.00
12/30/2029	338,000.00	5.000%				(196,752.26)	\$8,274,503.05
Total	\$5,003,000.00	*	\$3,457,005.31	\$8,460,005.31	\$11,250.00	(170,/34.40)	(913920 1 79C (913) 0 3

Yield Statistics

and the Market of the Market o	\$76,000.17
	15.191 Years
Average Life	4.5486809%
Average Coupon	
0290	4.6474241%
Net Interest Cost (NIC)	4.030323070
True Interest Cost (TIC)	4,5909190%
Bond Yield for Arbitrage Purposes	4 8403104%
All Inclusive Cost (AIC)	7.070010770
IRS Form 8038	4.6185818%
Net Interest Cost	
Weighted Average Maturity	15,100 10418

Morgan Keegan & Co., Inc. Kentucky Public Finance

Crittenden Livingston County Water District Cost of Operations after Project Completion

Operating Revenues

Water Sales

Forfeited discounts

Additional Sales Phase 6 AB (87 customers) Additional Sales Phase 7-8 (220 customers)

Additional Sales Phase 9 (306 customers)

Total Operating Revenues

Operating Expenses

Maintenance and Supplies

Salaries

Employee Retirement

Utilities

Chemicals & Treatment

Professional Fees

Commissioner Fees

Depreciation

Amortization

Insurance

Office Supplies and Expenses

Taxes & Licenses

Bad Debt Expense

Other Administrative Expenses

Additional Expense Estimates

Total Operating Expenses

Net Operating Income

Profor	ma
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20X)	<u>.</u>
	10 Mari
1.51	3,627
	#PSECONO CONTRACTOR
	2,639
1	1,426
Ç	3,794
11	6.549
1 75	0.025
1,15	8,035
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10	3,137
28	3,818
- L	5,452
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	2,787
	6.817
	4,260
	4,200
34	17,200
	5.390
	56,692
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	36,731
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BALANCE SHEET DECEMBER 31, 2003

ASSETS

Current Assets:	ው <i>32 3ጣራ</i>	
Cash on hand and in bank	\$ 33,376	
Customers' accounts receivable	161,725 13,403	
Prepaid expenses	13,403	\$ 208,504
		\$ 200,504
Restricted Funds:		
Bond and interest sinking fund:	100 020	
Certificates of deposit	108,930 83,707	
Cash in bank	65,707	
Depreciation reserve fund -	20,307	
cash in bank	7,785	
Cash in bank - tenant deposits	110	
Phase VI-A - cash in bank	1,094	
Phase VI-B - cash in bank	46,339	
Phase VII - cash in bank	4,007	
Phase VIII - cash in bank Phase IX - cash in bank	92,267	
Phase IA - Cash in Oank		364,546
The same of the sa		
Utility Plant and Equipment:	16,524,421	
Water plant and equipment in service	(2,568,711)	
Less accumulated depreciation		13,955,710
Other Assets:	275	
Utility deposits	79,421	
Unamortized bond costs		79,696
		12,020
TOTAL ACCETC		\$14,608,456
TOTAL ASSETS		
TOTAL ASSETS <u>LIABILITIES AND DISTRICT EQUITY</u>		
LIABILITIES AND DISTRICT EQUITY	g 20.052	
	\$ 29,052	
LIABILITIES AND DISTRICT EQUITY Current Liabilities: Accounts payable	84,115	
LIABILITIES AND DISTRICT EQUITY Current Liabilities: Accounts payable Retention payables Sales tax payable	84,115 7,139	
LIABILITIES AND DISTRICT EQUITY Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable	84,115 7,139 8,211	
LIABILITIES AND DISTRICT EQUITY Current Liabilities: Accounts payable Retention payables Sales tax payable	84,115 7,139 8,211 10,278	
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable	84,115 7,139 8,211 10,278 149,274	
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current	84,115 7,139 8,211 10,278 149,274 79,700	
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable	84,115 7,139 8,211 10,278 149,274	\$14,608,456
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current	84,115 7,139 8,211 10,278 149,274 79,700	
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt:	84,115 7,139 8,211 10,278 149,274 79,700 101,691	\$14,608,456
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds	84,115 7,139 8,211 10,278 149,274 79,700 101,691	\$14,608,456
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt:	84,115 7,139 8,211 10,278 149,274 79,700 101,691	\$14,608,456 \$ 469,460
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds	84,115 7,139 8,211 10,278 149,274 79,700 101,691	\$14,608,456
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion District Equity: Customer tap-on fees	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion District Equity: Customer tap-on fees Contributions in aid of construction	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion District Equity: Customer tap-on fees	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460 8,963,827
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion District Equity: Customer tap-on fees Contributions in aid of construction	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460 8,963,827
Current Liabilities: Accounts payable Retention payables Sales tax payable Payroll taxes withheld and payable Tenant deposits payable Interest payable Water district (revenue) bonds - current Notes payable - current portion Long-Term Debt: Water district (revenue) bonds Notes payable - long-term portion District Equity: Customer tap-on fees Contributions in aid of construction	84,115 7,139 8,211 10,278 149,274 79,700 101,691 7,457,800 1,506,027	\$14,608,456 \$ 469,460 8,963,827

STATEMENT OF REVENUES AND EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2003

Operating Revenues: Water sales Forfeited discounts Total operating revenues	\$1,242,908 22,666	\$1,265,574
Contractual services Salaries Employee retirement Utilities Chemicals and treatment expense Professional fees Commissioner fees Depreciation Amortization Insurance Office supplies and expenses Taxes and licenses Bad debt expense Other administrative expenses	103,137 283,818 45,452 73,063 52,787 6,817 4,260 347,200 5,390 56,692 10,333 36,731 3,651 45,723	
Total operating expenses		1,075,054
Operating income Other Income and (Expense): Interest expense Interest income Loss on disposal of asset Total other income (expense) EXCESS OF EXPENSES OVER REVENUES	(401,080) 8,922 (30)	(392,188) \$ (201,668)

STATEMENT OF CHANGES IN DISTRICT EQUITY FOR THE YEAR ENDED DECEMBER 31, 2003

	Customer Tap-On Fees	Contributions	Retained Earnings (Deficit)
Balance, beginning of year	\$819,143	\$5,711,137	\$(1,429,115)
Tap-on fees	155,850	-	**
Grant proceeds	-	91,443	•
Main extensions contributed (by developers or owners) for maintenance		28,379	-
Excess of expenses over revenues	No.	-	(201,668)
BALANCE, END OF YEAR	\$974,993	\$5,830,959	\$(1,630,783)

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2003

Cash Flows from Operating Activities: Excess of expenses over revenues Adjustments to reconcile excess of expenses	\$(201,668)
over revenues to net cash provided by operating activities: Depreciation Amortization Loss on disposal asset Increase in prepaid expenses Increase in accounts receivable Decrease in interest receivable Increase in utility deposits Decrease in accounts payable Decrease in retention payable	347,200 5,390 30 (992) (39,972) 3,592 (175) (21,588) (211,604) (7,630)
Decrease in accrued expenses Increase in tenant deposits payable Increase in interest payable Net cash provided by operating activities	1,992 148,524 \$ 23,099
Cash Flows from Capital and Related Financing Activities: Construction in progress Purchases of property and equipment Payments on bond principal Payments on note Customer tap-on fees Contributions in aid of construction Loan proceeds Grant proceeds	(207,424) (255,567) (35,000) (95,000) 155,850 28,379 339,800 91,443
Net cash provided by capital and related financing activities	22,481
Net increase in cash and cash equivalents Cash and cash equivalents at beginning of year CASH AND CASH EQUIVALENTS AT	45,580 <u>352,342</u> \$397,922

PRELIMINARY ENGINEERING REPORT



Case 2004-00366

CRITTENDEN-LIVINGSTON COUNTY WATER DISTRICT

IX WATER SYSTEM IMPROVEMENTS

Prepared By:

STIGALL ENGINEERING ASSOCIATES, INC. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215

> May, 2004 SEA Project No. 0251



Preliminary Engineering Report Crittenden-Livingston County Water District Phase IX Water System Improvements

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I. PURPOSE OF THE REPORT

The purpose of this report is to present the results of a preliminary engineering study of proposed water distribution system improvements for the Crittenden-Livingston County Water District. The proposed project will provide potable water service to approximately 300 residences in rural Crittenden and Livingston Counties. Figure I, located in the back of this report shows the approximate location of the proposed lines.

II. GENERAL INFORMATION & EXISTING FACILITIES

The Crittenden-Livingston County Water District recently completed a project to increase the capacity of its water treatment facility from 0.5 to 2.0 MGD in 2001. These improvements were made to allow the Crittenden-Livingston County Water District to serve the communities of Grand Rivers, Smithland, and Ledbetter and to allow for growth into currently unserved areas of both Crittenden and Livingston counties. As such, the District's infrastructure is well equipped to accommodate the line extension proposed in this project and referred to as Phase IX.

III. PROPOSED FACILITIES

In order to provide the proposed customers with potable water service, the following improvements are proposed:

- <u>Line 1</u>: Consists of approximately 17,960 l.f. of 6-inch line and appurtenances to serve rural customers along State Highway 135.
- <u>Line 2</u>: Consists of approximately 3,590 l.f. of 4-inch line and appurtenances to serve rural customers along Donald Winders Road.
- <u>Line 3</u>: Consists of approximately 3,925 l.f. of 4-inch line and appurtenances to serve rural customers along State Highway 91 North.
- Line 4: Consists of approximately 2,637 l.f. of 4-inch water line and appurtenances to serve rural customers along Easley Road.
- Line 5: Consists of approximately 8,292 l.f. of 4-inch water line and appurtenances to serve rural customers along Aunt Jane Tabernacle Road.
- Line 6: Consists of approximately 13,351 l.f. of 4-inch water line and appurtenances to serve rural customers along Hebron Church Road.
- <u>Line 7</u>: Consists of approximately 4,942 l.f. of 4-inch water line and appurtenances to serve rural customers along Old Fords Ferry Road.
- Line 8: Consists of approximately 3,180 l.f. of 4-inch water line and appurtenances to serve rural customers along Pickering Hill Road.
- Line 9: Consists of approximately 8,426 l.f. of 4-inch water line and appurtenances to serve rural customers along Roe Wafford Road/Cotton Patch Road.
- <u>Line 10</u>: Consists of approximately 14,272 l.f. of 4-inch water line and appurtenances to serve rural customers along Weston Road/State Highway 654 North.
- <u>Line 11</u>: Consists of approximately 7,000 l.f. of 4-inch water line and appurtenances to serve rural customers along Rudolph Chandler Road/Bells Mine Road.
- <u>Line 12</u>: Consists of approximately 4,814 l.f. of 4-inch water line and appurtenances to serve rural customers along Matoon Loop/Moore Springs Road.

- <u>Line 13</u>: Consists of approximately 22,871 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 654 South.
- <u>Line 14</u>: Consists of approximately 4,568 l.f. of 4-inch water line and appurtenances to serve rural customers along Cave Springs Road.
- <u>Line 15</u>: Consists of approximately 21,259 l.f. of 4-inch water line and appurtenances to serve rural customers along Fish Trap Road/Nunn Switch Road.
- <u>Line 16</u>: Consists of approximately 18,868 l.f. of 4-inch water line and appurtenances to serve rural customers along Copperas Spring Road/Blackburn Church Road.
- Line 17: Consists of approximately 10,156 l.f. of 3-inch water line and appurtenances to serve rural customers along Towery Road.
- <u>Line 18</u>: Consists of approximately 8,917 l.f. of 3-inch water line and appurtenances to serve rural customers along Sugar Grove Church Road.
- <u>Line 19</u>: Consists of approximately 26,253 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 120.
- Line 20: Consists of approximately 22,454 l.f. of 4-inch water line and appurtenances to serve rural customers along State Highway 132/Cool Springs Road.
- <u>Line 21</u>: Consists of approximately 6,333 l.f. of 4-inch water line and appurtenances to serve rural customers along Enon Church Road.
- <u>Line 22</u>: Consists of approximately 24,682 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 1917/Providence Road.
- Line 23: Consists of approximately 2,695 l.f. of 4-inch water line and appurtenances to serve rural customers along Wolf Creek Road.
- <u>Line 24</u>: Consists of approximately 14,941 l.f. of 4-inch water line and appurtenances to serve rural customers along Providence Road.
- <u>Line 25</u>: Consists of approximately 13,491 l.f. of 4-inch water line and appurtenances to serve rural customers along State Highway 2123.

- <u>Line 26</u>: Consists of approximately 18,811 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 137.
- <u>Line 27</u>: Consists of approximately 9,085 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 133.
- <u>Line 28</u>: Consists of approximately 17,785 l.f. of 6-inch water line and appurtenances to serve rural customers along Cave Springs Road.
- Line 29: Consists of approximately 9,761 l.f. of 4-inch water line and appurtenances to serve rural customers along State Highway 838.
- <u>Line 30</u>: Consists of approximately 10,678 l.f. of 4-inch water line and appurtenances to serve rural customers along Duley Road.
- <u>Line 31</u>: Consists of approximately 11,053 l.f. of 4-inch water line and appurtenances to serve rural customers along Bluff Road.
- <u>Line 32</u>: Consists of approximately 7,326 l.f. of 4-inch water line and appurtenances to serve rural customers along Palmer Road.
- <u>Line 33</u>: Consists of approximately 7,611 l.f. of 4-inch water line and appurtenances to serve rural customers along Dyer Hill Mine Road.
- <u>Line 34</u>: Consists of approximately 4,000 l.f. of 4-inch water line and appurtenances to serve rural customers along Head Road.
- <u>Line 35</u>: Consists of approximately 2,828 l.f. of 4-inch water line and appurtenances to serve rural customers along Eagle Mine Road.
- <u>Line 36</u>: Consists of approximately 2,689 l.f. of 4-inch water line and appurtenances to serve rural customers along Brown Mine Road.
- <u>Line 37</u>: Consists of approximately 7,182 l.f. of 4-inch water line and appurtenances to serve rural customers along Paddy's Bluff Road.
- Line 38: Consists of approximately 1,715 l.f. of 6-inch water line and appurtenances to serve rural customers along Crayne Cemetery Road.
- <u>Line 39</u>: Consists of approximately 9,600 l.f. of 4-inch water line and appurtenances to serve rural customers along Lloyd Road.
- <u>Line 40</u>: Consists of approximately 4,500 l.f. of 4-inch water line and appurtenances to serve rural customers along State Highway 902.

- <u>Line 41</u>: Consists of approximately 1,000 l.f. of 6-inch water line and appurtenances to serve rural customers along State Highway 902.
- <u>Line 42</u>: Consists of approximately 2,500 l.f. of 4-inch water line and appurtenances to serve rural customers along Henry Road.
- <u>Line 43</u>: Consists of approximately 4,372 l.f. of 4-inch water line and appurtenances to serve rural customers along Harp Road.
- <u>Line 44</u>: Consists of approximately 9,872 l.f. of 6-inch water line and appurtenances to serve rural customers along Furnace Pond Road.
- <u>Line 45</u>: Consists of approximately 6,000 l.f. of 4-inch water line and appurtenances to serve rural customers along Kellum Road.
- Line 46: Consists of approximately 22,277 l.f. of 4-inch water line and appurtenances to serve rural customers along Vaughn Road.
- <u>Line 47</u>: Consists of approximately 2,058 l.f. of 4-inch water line and appurtenances to serve rural customers along Hickory Creek Road.
- <u>Line 48</u>: Consists of approximately 6,464 l.f. of 4-inch water line and appurtenances to serve rural customers along Dunlap Road.
- <u>Line 49</u>: Consists of approximately 5,325 l.f. of 4-inch water line and appurtenances to serve rural customers along Rednour Road.
- <u>Line 50</u>: Consists of approximately 22,147 l.f. of 10-inch water line and appurtenances to serve rural customers along State Highway 506.
- <u>Line 51</u>: Consists of approximately 1,050 l.f. of 8-inch water line and appurtenances to serve rural customers along Country Club Road at U.S. 60.

In addition, a 100,000 gallon elevated tank is to be constructed near the Joy community to provide improved service to the northwest region of Livingston County. Also, a 600,000 gallon elevated tank is to be constructed on Wilson Hill in Marion. This facility will serve most of Crittenden County and will put the District in a favorable position to serve the City of Marion, should both parties agree. Booster pump stations are to be constructed to serve the proposed tanks including telemetry.

IV. BUDGET AND FINANCING METHODS

The Crittenden-Livingston County Water District is requesting financial assistance from the Kentucky Infrastructure Authority to construct the proposed water system improvements.

A. Estimated Construction Budget

The estimated construction project and the project budget for the proposed improvements, including proposed methods of financing, are as follows:

Estimated Construction Cost:

Lines and Pump Station Tanks	\$3,500,000 \$ 600,000
Total Estimated Construction Cost	

B. Estimated Project Budget:

Construction	\$ 4	4,100,000
Engineering	\$	260,000
Inspection	\$	110,000
Legal & Administrative	\$	50,000
Land & Right-of-Way		
Bonds & Insurance		80,000
Interim Financing	\$	200,000
Contingencies	\$	160,000
Outling Chairs		

Total Estimated Project Budget......\$5,000,000

C. <u>Proposed Method of Financing</u>

KIA Bond Issuance.....\$5,000,000

V. <u>EFFECT OF PROPOSED BUDGET ON REVENUE & EXPENSES</u>

The latest completed audit of the District (ending December 31, 2003) shows total revenues of \$1,265,574 and total operating expenses of \$1,075,054, including depreciation. Interest expenses of \$401,080 coupled with other income and expenses resulted in a net loss of \$201,668 for the District in 2003 with depreciation and an income of \$145.532, excluding depreciation.

However, the District recently completed its Phase VIB project and is currently approximately 60% complete with Phase VIII and scheduled to begin construction on Phase VII in August, 2004. Once these projects are completed this will have a positive impact on the financial condition of the District, however it will be in the 2006 audit period before the full financial impact of these projects is realized.

VI. EXISTING WATER RATES AND CONNECTION FEES

The Crittenden-Livingston County Water District placed into effect the following rates (which are currently in use) for their customers on November 6, 2003. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Public Service Commission (PSC) prior to the effective date.

A. Monthly Water Rates - Existing

Rate Block: 5/8" x 3/4" Meter	R	ate per 1,000 Gallons
First 1,000 Gallons	. \$	14.02 (Minimum)
Next 9,000 Gallons	. \$	6.73 per 1,000 gallons
Next 10,000 Gallons	. \$	5.62 per 1,000 gallons
Over 20,000 Gallons	. \$	4.41 per 1,000 gallons
Rate Block: 1" Meter	R	ate per 1,000 Gallons
First 5,000 Gallons	. \$	40.94 (M inimum)
Next 5,000 Gallons	. \$	6.73 per 1,000 gallons
Next 10,000 Gallons	. \$	5.62 per 1,000 gallons
Over 20,000 Gallons	. \$	4.41 per 1,000 gallons
Rate Block: 2" Meter	R	ate per 1,000 Gallons
First 15,000 Gallons	. \$1	102.69 (Minimum)
Next 5,000 Gallons	.\$	5.62 per 1,000 gallons
Over 20,000 Gallons	. \$	4.41 per 1,000 gallons
Bulk Sales	. \$	4.12 per 1,000 gallons
Wholesale Rate	. \$	2.20 per 1,000 gallons

VII. CONCLUSION

According to the results of the investigations and studies as presented in this Preliminary Engineering Report, it is our considered opinion that the construction of the Crittenden-Livingston County Water District Water System Improvements (Phase IX) is sound and feasible when supported by an appropriate rate increase to be determined after bids are received and after consultation with Kentucky Rural Water and KIA bonding agent.

FINAL ENGINEERING REPORT



Case 2004-00366

CRITTENDEN-LIVINGSTON COUNTY WATER DISTRICT

IX WATER SYSTEM IMPROVEMENTS

Prepared By:

STIGALL ENGINEERING ASSOCIATES, INC. 4117 Hillsboro Pike, Suite 206 Nashville, Tennessee 37215

> August, 2004 SEA Project No. 0251



Final Engineering Report Crittenden-Livingston County Water District Phase IX Water System Improvements

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I. PURPOSE OF THE REPORT

The purpose of this report is to present the results of a final engineering study of proposed water distribution system improvements for the Crittenden-Livingston County Water District. The proposed project will provide potable water service to approximately 300 residences in rural Crittenden and Livingston Counties. Figure I, located in the back of this report shows the approximate location of the proposed lines.

II. GENERAL INFORMATION & EXISTING FACILITIES

The Crittenden-Livingston County Water District recently completed a project to increase the capacity of its water treatment facility from 0.5 to 2.0 MGD. These improvements were made to allow the Crittenden-Livingston County Water District to serve the communities of Grand Rivers, Smithland, and Ledbetter and to allow for growth into currently unserved areas of both Crittenden and Livingston counties. As such, the District's infrastructure is well equipped to accommodate the line extension proposed in this project and referred to as Phase IX.

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- <u>Line 47</u>: Consists of approximately 2,058 l.f. of 4-inch water line and appurtenances to serve rural customers along Hickory Creek Road.
- <u>Line 48</u>: Consists of approximately 6,464 l.f. of 4-inch water line and appurtenances to serve rural customers along Dunlap Road.
- <u>Line 49</u>: Consists of approximately 5,325 l.f. of 4-inch water line and appurtenances to serve rural customers along Rednour Road.
- <u>Line 50</u>: Consists of approximately 22,147 l.f. of 10-inch water line and appurtenances to serve rural customers along State Highway 506.
- <u>Line 51</u>: Consists of approximately 1,050 l.f. of 8-inch water line and appurtenances to serve rural customers along Country Club Road at U.S. 60.

In addition, a 100,000 gallon elevated tank is to be constructed near the Joy community to provide improved service to the northwest region of Livingston County. Also, a 600,000 gallon elevated tank is to be constructed on Wilson Hill in Marion. This facility will serve most of Crittenden County and will put the District in a favorable position to serve the City of Marion, should both parties agree. Booster pump stations are to be constructed to serve the proposed tanks including telemetry.

IV. BUDGET AND FINANCING METHODS

A. Estimated Construction Budget

The estimated and as-bid and construction budgets for the proposed improvements, are as follows:

Estimated Construction Cost:

,500,000 <u>600,000</u>						
,100,000						
As-Bid Construction Cost:						
,477,745 942,640 904,595						
759,769 ,084,749						

B. Estimated Project Budget

The estimated and as-bid and construction budgets for the proposed improvements, are as follows:

Construction	\$4	4.100.000
Engineering		260,000
Inspection		110,000
Legal & Administrative		50,000
Land & Right-of-Way		40,000
Bonds & Insurance		80,000
Interim Financing	\$	200,000
Contingencies	<u>\$</u>	<u>160,000</u>
-		
Total Estimated Project Budget	\$5	5,000,000

As-Bid Project Budget:

	Construction	\$4	,084,749
	Engineering	\$	260,600
	Surveying & Geotechnical	\$	9,000
	Inspection	\$	109,000
	Bond Issuance	\$	175,000
	Land Acquisition	\$	20,000
	Interim Financing	\$	180,000
	Contingencies	\$	161,651
	Total Project Budget		,000,000
C.	Proposed Method of Financing		
	KIA Bond Issuance	\$ 5	,000,000

V. EFFECT OF PROPOSED BUDGET ON REVENUE & EXPENSES

The latest completed audit of the District (ending December 31, 2003) shows total revenues of \$1,265,574 and total operating expenses of \$1,075,054, including depreciation. Interest expenses of \$401,080 coupled with other income and expenses resulted in a net loss of \$201,668 for the District in 2003.

However, the District recently completed its Phase VIB project and is currently approximately 70% complete with Phase VIII and construction began on Phase VII in August, 2004. Once these projects are completed, the Crittenden-Livingston County Water District will serve water to Smithland, Grand Rivers, Ledbetter, Marion and serve an additional 300 +/- customers. This will have a positive impact on the financial condition of the District, however it will be in the 2006 audit period before the full financial impact of both projects is realized.

Representatives with Kentucky Rural Water and the Bonding Agent for the Kentucky Infrastructure Authority project an immediate 10% increase will be needed and this rate will be evaluated upon completion of the project once the Phase VII and VIII projects have been completed in order to determine if an additional increase will be needed.

VI. EXISTING WATER RATES AND CONNECTION FEES

The Crittenden-Livingston County Water District placed into effect the following rates (which are currently in use) for their customers on November 6, 2003. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of the Public Service Commission (PSC) prior to the effective date.

A. Monthly Water Rates - Existing

Rate Block: 5/8" x 3/4" Meter	Rate per 1,000 Gallons
First 1,000 Gallons	
Next 9,000 Gallons	\$ 6.73 per 1,000 gallons
Next 10,000 Gallons	\$ 5.62 per 1,000 gallons
Over 20,000 Gallons	\$ 4.41 per 1,000 gallons
Rate Block: 1" Meter	Rate per 1,000 Gallons
First 5,000 Gallons	\$ 40.94 (Minimum)
Next 5,000 Gallons	\$ 6.73 per 1,000 gallons
Next 10,000 Gallons	\$ 5.62 per 1,000 gallons
Over 20,000 Gallons	\$ 4.41 per 1,000 gallons
Rate Block: 2" Meter	Rate per 1,000 Gallons
First 15,000 Gallons	\$102.69 (Minimum)
Next 5,000 Gallons	\$ 5.62 per 1,000 gallons
Over 20,000 Gallons	. \$ 4.41 per 1,000 gallons
Bulk Sales	.\$ 4.12 per 1,000 gallons
Wholesale Rate	.\$ 2.20 per 1,000 gallons

VII. CONCLUSION

According to the results of the investigations and studies as presented in this Preliminary Engineering Report, it is our considered opinion that the construction of the Crittenden-Livingston County Water District Water System Improvements (Phase IX) is sound and feasible when supported by the proposed method of funding and the proposed 10% rate increase.